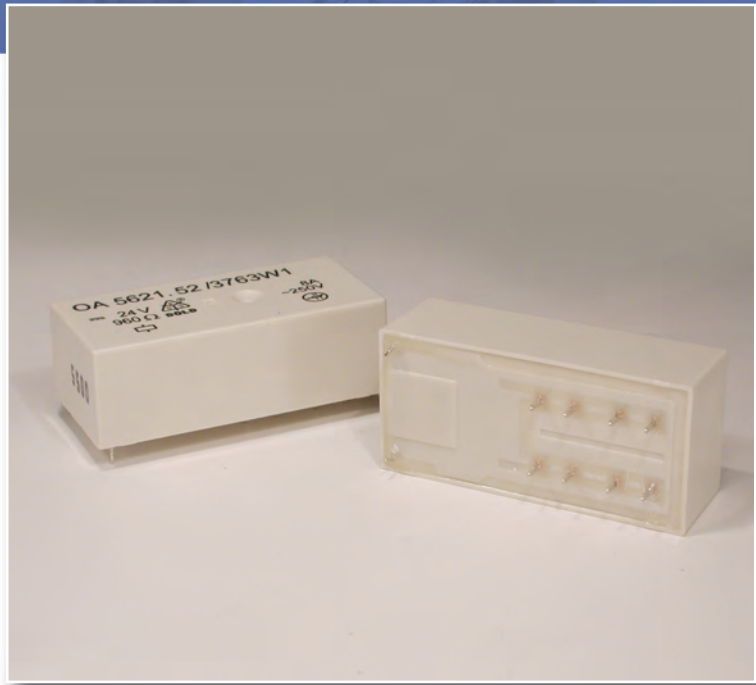


# Safety Relay

## OA 5621 / OA 5621S

### Features

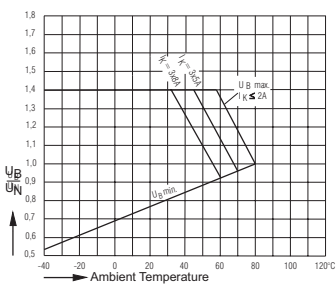
- 4 output contacts
- International approvals: TÜV, UL, cUL
- Quality control check for each safety relay
- Forced-guided contacts, all gold flash plated
- Contact Gap > 0.5 mm throughout life of relay
- Various contact materials, mixed contact material optional
- High coil voltage range
- High breakdown voltage: contact/coil  $\geq 4$  KV
- High creeping distance: contact/contact  $\geq 4$  KV  
contact/coil  $\geq 5.5$  mm  
contact/contact  $\geq 5.5$  mm
- Protection Rating RTIII wash proof
- Custom design available,
  - coil voltage
  - coil resistance
  - contact pressure
  - operate/release time
  - gold plated double contacts
- Standard Pack: 25 piece sleeve or 250 piece case



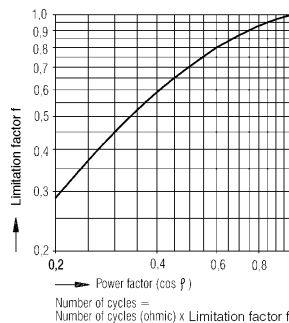
### Technical Data

- **Nominal Coil Voltage** .....6, 12, 24, 48, 60, 110, DC
- **Coil Power Dissipation** .....0.6 W
- **Min./Max. Switching Voltage** .....AC/DC10V / 250VDC, 400VAC<sup>1</sup>
- **Min./Max. Switching Current** .....10mA / 8 A (3 x 8A simultaneous)<sup>1</sup>
- **Min./Max. Switching Power — DC** .....0.1W / 200W<sup>1</sup>
- **Min./Max. Switching Power — AC** .....0.1VA / 2000VA<sup>1</sup>
- **Contact Switching Rate** .....10 operations per second
- **Relay Operate Time** .....12 ms
- **Relay Release Time** .....8 ms
- **Operation Vibration** .....0.35 mm Ampl. max @ 10...200Hz, 5g max
- **Contact Arrangements** .....3NO/1NC, 2NO/2NC
- **Contact Material** .....AgNi10+0.2 $\mu$ mAu  
.....AgSnO<sub>2</sub>+0.2 $\mu$ mAu, AgNi10+5 $\mu$ mAu
- **Mechanical Life** .....>20x10<sup>6</sup> operation cycles
- **Electrical Life** .....AgSnO<sub>2</sub> >1.5x10<sup>5</sup>, AgNi10 >1.0x10<sup>5</sup>  
.....operation cycles @ 230V AC, 8A, cos  $\phi$ =1
- **Ambient Temperature** .....-40...+80°C
- **Cover Material** .....Polyamide 6
- **Weight** .....35 g
- **Wave Solder Temperature/Duration** .....260°C/5s
- More detailed data upon request

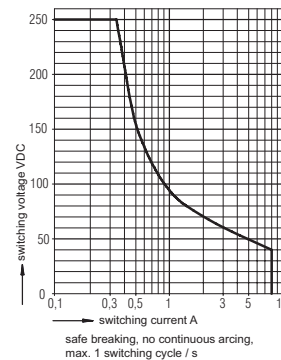
### Diagrams



Relay operation voltage vs. ambient temperature



Limitation factor for inductive loads



Maximum switching power curve

<sup>1</sup> AgNi10+5 $\mu$ mAu contact material has limited switching capacity (Min./Max. 2V/60VAC/DC, 2mA/0.3A, 10mVA/12VA, 10mW/12W)

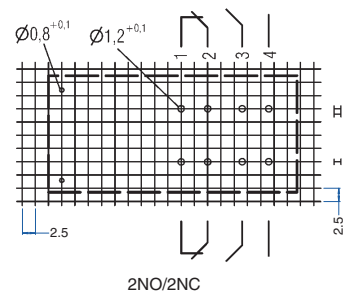
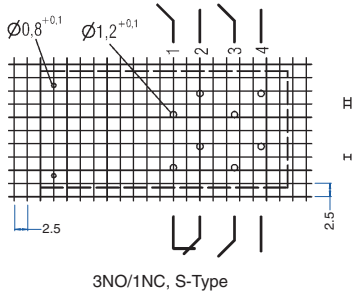
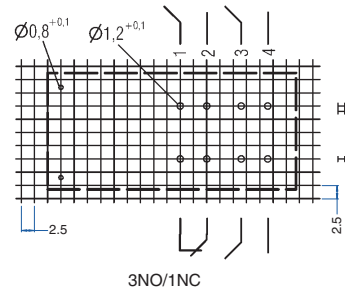
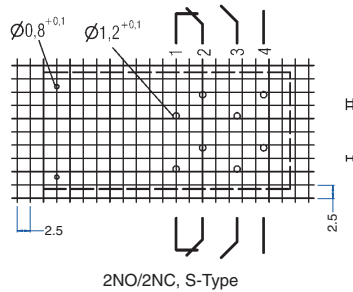
### Relay Data

### Ordering Information

Rated Voltage	Voltage Range	Coil Resistance (10%)	3 NO/1 NC Type	2 NO/2 NC Type	3 NO/1 NC S-Type	2 NO/2 NC S-Type
6V	4.5 - 8.4V	60 Ω	56.OA21.0631□	56.OA21.0622□	56.OA21S.0631□	56.OA21S.0622□
12V	9.0 - 16.8V	240 Ω	56.OA21.1231□	56.OA21.1222□	56.OA21S.1231□	56.OA21S.1222□
24V	18.0 - 33.6V	960 Ω	56.OA21.2431□	56.OA21.2422□	56.OA21S.2431□	56.OA21S.2422□
48V	36.0 - 67.2V	3840 Ω	56.OA21.4831□	56.OA21.4822□	56.OA21S.4831□	56.OA21S.4822□
60V	45.0 - 84.0V	6000 Ω	56.OA21.6031□	56.OA21.6022□	56.OA21S.6031□	56.OA21S.6022□
110V	82.5 - 154.0V	20000 Ω	56.OA21.1131□	56.OA21.1122□	56.OA21S.1131□	56.OA21S.1122□

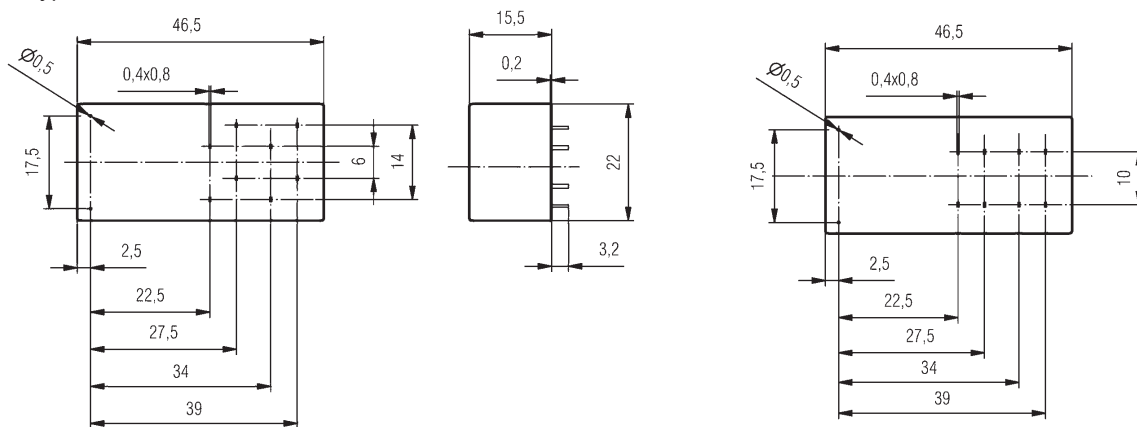
Contact Material, Example: CAgSnO<sub>2</sub>+2μmAu  
NAgNi10+.2μmAu  
SAgNi10+5μmAu

## Footprints (solder side)



## Dimensions

### S-Type



Note: All dimensions are shown in millimeters. To convert to inches, divide by 25.4.